Chapter 14: Solid Waste and Sanitation Services

A. INTRODUCTION

Implementation of the proposed project would result in changes in the demand for solid waste management and sanitation services provided at the development site. This chapter describes the increased demand in comparison to the future without the proposed project (the "No Action" condition) and assesses the proposed project's effects on these solid waste and sanitation services.

This chapter concludes that because the proposed project (either scenario) would not generate a large amount of solid waste when compared to the No Action condition, there would be no potential for significant adverse impacts on solid waste and sanitation services.

B. EXISTING CONDITIONS

SOLID WASTE SERVICES

In the City of New York, solid waste from commercial and manufacturing uses is collected by private carters, while residential and institutional refuse is handled by the New York City Department of Sanitation (DSNY). DSNY collects approximately 16,500 tons per day (tpd) of refuse and recyclables, of which approximately 5,000 tons are recycled.

Commercial carters pick up solid waste from businesses, manufacturers, and offices, and take the waste materials to transfer stations, where the recyclable materials are separated from the solid waste. The solid waste is consolidated into larger trucks for transport and disposal in landfills outside of New York City. The recyclable materials are sold and transported to manufacturing facilities. Private carters handle about 14,830 tons per week of recyclables and solid waste. In addition, private carters handle about 19,070 tons per day of construction debris and excavated materials.

The City's solid waste management services are undertaken in accordance with the existing Solid Waste Management Plan (SWMP), which is the responsibility of DSNY. The current SWMP was approved by the City Council on July 19, 2006, and adopted by New York City on July 27, 2006. The SWMP was approved by the New York State Department of Environmental Conservation (NYSDEC) in a letter received by DSNY on October 27, 2006. The SWMP establishes a hierarchy of preferred solid waste management methods to reduce and process solid waste generated within the city. The objectives of the SWMP are, in order of importance: waste minimization; reuse, recycling, or composting; and export for out-of-city disposal. The SWMP mandates that solid waste be transferred to solid waste management facilities located in each borough, including special (hazardous materials) waste collection sites, composting facilities, and bulk residential waste sites. Local Law 19 of 1989 requires that DSNY and private carters collect recyclable materials and deliver them to material recovery facilities. Commercial establishments are subject to recycling requirements. Businesses must source-separate certain

types of paper wastes, cardboard, metal items, and construction wastes. Food and beverage establishments must recycle metal, glass, and plastic containers, and aluminum foil, in addition to meeting the commercial recycling requirements.

The new SWMP proposes three broad categories of action to address traffic issues associated with commercial waste handling, as follows: (1) improve conditions at and around transfer stations; (2) facilitate a transition from a network heavily reliant on trucks to one that relies primarily on barge and rail; and (3) redistribute private transfer capacity from a small number of communities that have the largest proportion of the system's impacts.

SOLID WASTE GENERATION

The development site is currently occupied by the 1,700-room, approximately 1.4 million gross-square-foot Hotel Pennsylvania, which also contains approximately 46,400 gross square feet (gsf) of ground-floor retail uses. The existing hotel and retail uses generate approximately 42,914 pounds per week (approximately 21 tons) of solid waste (see **Table 14-1**).

Table 14-1
Existing Solid Waste Generation

Use	Employees	Solid Waste Generated (pounds per week)
Hotel[1]	450	33,750
Retail[2]	116	9,164
	Total	**42,914**

Notes:
1. Hotel uses generate 75 pounds per week per employee.
2. Retail uses generate 79 pounds per week per employee.
Source: 2001 *CEQR Technical Manual,* Table 3M-1, "Solid Waste Generation Rates."

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

As described in Chapter 2, "Procedural and Analytical Framework," absent approval of the proposed actions, the project sponsor will develop the development site with an as-of-right (or No Action) building permitted under existing C6-6 and C6-4.5 zoning. This No Action building will contain approximately 1.6 million gsf, of which 1.3 million gsf will be for office use and 40,600 gsf will be for retail use. The remaining space will be occupied by mechanical space, lobby area, and amenity space. These latter three uses do not generate solid waste. Therefore, the analysis only considers the solid waste generated by the office and retail uses. The No Action building will generate approximately 79,305 pounds per week (approximately 40 tons) of solid waste (see **Table 14-2**). This increase in solid waste generation will be accommodated by private waste handling services.

Table 14-2
No Action Building: Estimated Solid Waste Generation

Use	Employees	Solid Waste Generated (pounds per week)
Commercial Office[1]	5,280	68,640
Retail[2]	135	10,665
	Total	**79,305**

Notes:
1. Office uses generate 13 pounds per week per employee.
2. Retail uses generate 79 pounds per week per employee.
Source: 2001 *CEQR Technical Manual,* Table 3M-1, "Solid Waste Generation Rates."

As described above, the SWMP mandates that solid waste be transferred to solid waste management facilities located in each borough. As currently drafted, the SWMP will require all commercial waste generated from the development site to be transported to the Marine Transfer Station at Pier 99 on West 59th Street, where commercial waste would be received and processed.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

As discussed in Chapter 1, "Project Description," in the future with the proposed project, the development site would be redeveloped with either the Single-Tenant Office or Multi-Tenant Office Scenario. Both scenarios would consist of new commercial office space located above a podium base.

The Single-Tenant Office Scenario's total projected solid waste generation would be approximately 133,363 pounds per week (approximately 67 tons) (see **Table 14-3**). This amount of solid waste represents an incremental increase of approximately 54,058 pounds per week when compared to the No Action building.

Table 14-3
Single-Tenant Office Scenario: Estimated Solid Waste Generation

Use	Employees	Solid Waste Generated (pounds per week)
Commercial Office and Trading Use[1]	9,888[3]	128,544
Retail[2]	61	4,819
	Total	**133,363**

Notes:
1. Office uses generate 13 pounds per week per employee.
2. Retail uses generate 79 pounds per week per employee.
3. The Single-Tenant Office Scenario includes five floors of trading use with 750 traders per floor. The total number of office employees includes the 3,750 trading floor employees and the 6,088 employees in the commercial office space.
Source: 2001 *CEQR Technical Manual,* Table 3M-1, "Solid Waste Generation Rates."

Table 14-4 presents the Multi-Tenant Office Scenario's total projected solid waste generation, which would be approximately 193,749 pounds per week (approximately 97 tons) of solid waste, an incremental increase of approximately 114,444 pounds per week when compared to the No Action building.

Table 14-4
Multi-Tenant Office Scenario:
Estimated Solid Waste Generation

Use	Employees	Solid Waste Generated (pounds per week)
Commercial Office[1]	7,575	98,475
Retail[2]	1,206	95,274
	Total	**193,749**

Notes:
1. Office uses generate 13 pounds per week per employee.
2. Retail uses generate 79 pounds per week per employee.
Source: 2001 *CEQR Technical Manual,* Table 3M-1, "Solid Waste Generation Rates.

Compared with the approximately 115,000 tons of solid waste generated weekly in New York City, the amount of solid waste generated by the proposed project (either scenario) would be considered a negligible increment. The proposed project (either scenario) would comply with the City's recycling program and would be designed to accommodate source separation of recyclables in conformance with City recycling regulations. In addition, the proposed project would not conflict with, or require any amendments to, the City's solid waste management objectives as stated in the SWMP. Therefore, no significant adverse solid waste impacts would result from the proposed project. ✷